

Dict. Sci. nat., Suppl. 1 : 485) and *Kaninia* Walcott & Resser, 1928 (*Rep. sci. Res. Norw. Exped. Novaya Zemlya* 2 : 6), are nomenclatorially permissible, since they do not comply with clause (1) in *Opinion* 147 in being homonyms, for the first takes origin from *canis* (a dog) and the second from a place name. It seems clear that *Törnquistia* and *Tornquistia* not only take origin from different sources but are also acoustically different; I suggest that, before reaching a decision to make these names homonyms, it would be well to take opinions from relevant nationals, whose languages carry letters with diacritic marks.

3. If *Törnquistia* and *Tornquistia* are both held to be nomenclatorially available, it should however be borne in mind that at some future date each of these generic names is potentially the base of a family name; the names so formed would be TÖRNQUISTIDAE and TORNQUISTIDAE. A state of affairs such as already exists for the two families HARPIDAE and for the two other families named SCUTELLIDAE would then be approached, though in the present instance it would be a case of resemblance, not of identity in name. The case of the names HARPIDAE and SCUTELLIDAE is so confusing as to be undesirable, and as such is already under consideration by the International Commission (reference Z.N.(S.)357).

**ON THE STATUS FOR THE PURPOSES OF ZOOLOGICAL
NOMENCLATURE OF THE WORK ENTITLED "THE
NATURAL HISTORY OF CORNWALL" BY WILLIAM BOR-
LASE PUBLISHED IN 1758, WITH SPECIAL REFERENCE
TO THE AVAILABILITY OF THE GENERIC NAME
"ASTACUS" BORLASE, 1758 (CLASS CRUSTACEA, ORDER
DECAPODA)**

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(Commission's reference Z.N.(S.)543)

1. When during the late war (in 1944) I was engaged in checking the entries made in the *Official List of Generic Names in Zoology* with a view to its eventual publication in book form (in accordance with the decision announced in 1943 (*Bull. zool. Nomencl.* 1 : xxii-xxiv), I found, when I came to examine the entries in the *Official List* made in the Commission's *Opinion* 104 (1928, *Smithson. misc. Coll.* 73 (No. 5) : 27) that there was a doubt as to the availability under the *Règles*, of the generic name *Astacus* Pallas, 1772 (*Spicil. zool.* 9 : 81) placed on the *Official List* under that *Opinion*.

2. The doubt in regard to the availability of the name *Astacus* as from Pallas, 1772 arose from the fact that on three occasions prior to the publication of volume 9 of the *Spicilegia zoologica* of Pallas, the name *Astacus* had been used—

or was alleged to have been used—as a generic name by other authors. These three earlier uses of the name *Astacus* were the following :—

- (1) *Astacus* Borlase, 1758, *Nat. Hist. Cornwall* : 274.
- (2) *Astacus* Gronovius, 1762, *Acta Helv.* **5** : 365 (not vol. 4, published in 1760, as frequently stated) ;
- (3) *Astacus* Gronovius, 1764, *Zoophylac. gronov.* : 227.

3. Of the foregoing works, the *Zoophylacium gronovianum* of 1764, was a non-binominal work which in *Opinion* 20 (1910, *Smithson. Publ.* **1938** : 48-50) the International Commission had ruled as a “binary” work. The (in 1944) still unsettled controversy as to the validity of the ruling in regard to the status of generic names published by authors, who, though non-binominal, were allegedly “binary” would thus have complicated the issue of the availability of the name *Astacus* Pallas, 1772, through the competition of the earlier name *Astacus* Gronovius, 1764, if it had not been for the fact that, without prejudice to the validity of its decision in *Opinion* 20, the Commission in *Opinion* 89 (1925, *Smithson. misc. Coll.* **73** (No. 3) : 27-33) had used its plenary powers to suppress the *Zoophylacium gronovianum* for nomenclatorial purposes. Thus, already by 1944, the name *Astacus* Gronovius, 1764, was seen to be invalid.

4. The unsettled question of “binary” versus “binominal” nomenclature did however arise in connection with the name *Astacus* as published by Gronovius in 1762 (see paragraph 2 (2) above), for Gronovius was never a binominalist and the sole claim that could be advanced in favour of the name *Astacus* Gronovius, 1762, being accepted as an available name is that it was published by a “binary”, though not binominal, author. Dr. Karl Jordan, then President of the International Commission, kindly examined this article by Gronovius and reported (*in litt.* 20th January 1944) : “The nomenclature of this publication of Gronow’s on the animals of Belgium is of the pre-Linnaean type : generic names generally as the first word of a description ; no trivial names, except occasionally in the literature cited, but names given in the Flemish vernacular. Six species of *Astacus* are described, Nos. 450 to 455. The paper is written in Latin.” In 1944, therefore, it was only possible to note that the question of the availability of the name *Astacus* Pallas, 1772, in relation to the name *Astacus* Gronovius, 1762, was one which must await decision, until at the next (Thirteenth) International Congress of Zoology a final ruling was given on the question of the meaning of the expression “nomenclature binaire” under the procedure laid down by the Twelfth International Congress of Zoology, Lisbon, 1935 (see 1943, *Bull. zool. Nomencl.* **1** : 45, 55). In Paris in 1948 the Thirteenth International Congress of Zoology accepted the conclusion unanimously reached by the International Commission that the expression “nomenclature binaire” possessed, and, as used in the *Règles*, always had possessed a meaning identical with that of the expression “nomenclature binominale” and decided to substitute the latter expression for the expression “nomenclature binaire”, wherever that expression had till then appeared in the *Règles* (see 1950, *Bull. zool. Nomencl.* **4** : 63-66). The effect of this decision is to show that the name *Astacus* Gronovius, 1762, possesses no rights under the Law of Priority.

5. In the light of the foregoing decision, the only possible competitor of the name *Astacus* Pallas, 1772, is the name *Astacus* Borlase, 1758. During the war it was not possible for me to examine a copy of Borlase's *Natural History of Cornwall*, and, from this point of view also, the status of the name *Astacus* Pallas, 1772, had then to be left in doubt. I have now had an opportunity of examining the copy of Borlase's book in the library of the Zoological Society of London, and have prepared the following Report :—

The Natural History of Cornwall by William Borlase, [1695-1772], was published at Oxford in 1758. Neither the title page nor the preface contains any information throwing light upon the exact date of publication in that year. The book is a small folio (pp. xix, 326, 28 pls., 1 map).

2. Although the title implies that the subject matter of this book is the natural history of the county of Cornwall, a considerable part of it is concerned either with matters of antiquarian interest or a description of the mineral wealth of the county. The remainder consists of a discursive account of the animals and plants recorded as having been observed in the county or on its shores or in its neighbouring waters. The arrangement of the book is in no sense systematic. The species mentioned are referred to usually under their vernacular English names ; after these there are usually added the Latin names used for those species by some established author. The type of nomenclature employed in this book may be judged by the following quotations taken from page 264, relating respectively to the porpoise and the dolphin :—

- (1) " The porpesse [sic] *Porcus marinus* seu *Phocaena* vel *Tursio* ; *Delphinus corpore fere coniformi, dorso lato, rostro subacuto* Artedi."
- (2) " The Dolphin, the *Delphinus* of the ancients and moderns (Ray, p. 12). *Delphinus corpore oblongo subtereti, rostro longo, acuto* of Artedi, p. 105".

3. The foregoing examples show at once that no attempt was made in this book to apply the principles of binominal nomenclature instituted by Linnaeus in 1758. There is, indeed, so far as I can see, no reference at all to Linnaeus throughout the book. Certainly, there is no reference to the system of binominal nomenclature inaugurated in the 10th edition of the *Systema Naturae*. The total absence of any reference to that work makes it virtually certain either that Borlase's *Natural History* was published before the 10th edition of Linnaeus' great work or that, if the latter was the first to have been published, its existence was unknown to Borlase, who, it may incidentally be noted, complained in his preface of the isolation of Cornwall at that time from the general world of learning.

4. It is perfectly clear from the evidence summarised above that in his *Natural History of Cornwall* Borlase did not apply the principles of binominal nomenclature, of the existence of which, as enunciated by Linnaeus in the 10th edition of the *Systema Naturae* published in the same year, he was indeed probably unaware.

5. As regards the name *Astacus*, the alleged use of which by Borlase led to the present inquiry, it may be noted that this occurs only once—on page 274—where it was used parenthetically in the expression " the lobster, or *Astacus verus*". No description was given either of the genus or the species. Accordingly, since it has been ruled in *Opinion* 1 (1910, *Smithson. Publ.* 1938 : 5) in a provision that it was decided by the Thirteenth International Congress of

Zoology (1950, *Bull. zool. Nomencl.* 4: 148-149) to incorporate in the *Règles*, that the citation of a vernacular name (such as "the lobster") does not constitute an "indication" for the purposes of Proviso (a) to Article 25, both the generic name *Astacus* and the specific name *Astacus verus*, as published by Borlase in 1758, would have been *nomina nuda*, even if (contrary to what we have seen to be the case) new names in Borlase's *Natural History of Cornwall* had satisfied the requirements of Proviso (b) to Article 25.

6. Old books of doubtful nomenclatorial standing, such as Borlase's *Natural History of Cornwall*, constitute a perpetual menace to stability in nomenclature and it is extremely desirable that the status of such books should be clarified as rapidly as possible. In the present case, it is essential that there should be such a clarification, in order that the doubts in regard to the availability of the name *Astacus* Pallas, placed on the *Official List in Opinion* 104 should be dispelled with as little further delay as possible. In the light of the foregoing Report it is recommended that the International Commission should now issue a ruling that Borlase's book is not an available book for nomenclatorial purposes. In order further to clarify the position as regards the availability of the generic name *Astacus* Pallas, 1772, it is suggested that the older, but invalid, uses of this generic name should be disposed of by their being placed on the *Official Index of Rejected and Invalid Generic Names in Zoology*. The specific recommendations now submitted to the International Commission on Zoological Nomenclature are therefore that it should :—

- (1) rule that in the work entitled *The Natural History of Cornwall*, published in 1758, William Borlase did not apply the principles of binominal nomenclature and therefore that new names published in that work do not satisfy the requirements of Proviso (b) to Article 25 of the *Règles*, and accordingly possess no rights under the Law of Priority in virtue of having been so published ;
- (2) place the under-mentioned generic names on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—
 - (a) *Astacus* Borlase, 1758 (a name published in a book in which the author did not apply the principles of binominal nomenclature) ;
 - (b) *Astacus* Gronovius, 1762 (a name published in a paper in which the author did not apply the principles of binominal nomenclature) ;
 - (c) *Astacus* Gronovius, 1764 (a name published in a book in which the author did not apply the principles of binominal nomenclature).